

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of forming a carbon layer by vapor phase deposition, comprising the steps of:

adjusting a content of particles having a particle size of 0.5 μm or more in a film deposition system of the carbon layer to 1000 particles/ ft^3/min or less; and then

starting a film deposition process of the carbon layer;

wherein said carbon layer is formed as a protective coating on a thermal head performing thermal recording;

wherein the carbon layer is formed directly on top of a lower protective layer such that the thermal head has a protective coating, and

wherein the carbon layer and the lower protective layer are successively formed on the thermal head under a continuous vacuum.

2. (original): The method according to claim 1, wherein said content of the particles having the particle size of 0.5 μm or more is reduced to 500 particles/ ft^3/min .

3. (cancelled)

4. (original): The method according to claim 1, wherein a lower limit of said content of

the particles having the particle size of 0.5 μm or more ranges between 50 particles/ ft^3/min and 100 particles/ ft^3/min .

4. 5. (currently amended): The method of forming a carbon layer by vapor phase deposition according to claim 1 3, wherein said carbon layer is formed on top of an intermediate layer and the intermediate layer is formed on top of a lower protective layer such that the thermal head has a protective coating of a three-layer structure.

5. 6. (previously presented): The method of forming a carbon layer by vapor phase deposition according to claim 5, wherein said carbon layer has a thickness from 0.5 μm to 5 μm , said intermediate layer has a thickness from 0.05 μm to 1 μm , and said lower protective layer has a thickness from 0.2 μm to 20 μm .

7. (canceled).

8. (cancelled)

6. 9. (previously presented): The method according to claim 1, wherein said step of adjusting the content of particles includes cleaning an interior of a chamber of the film deposition system in which the film deposition process occurs using a dust cloth that produces no more than 3000 particles/cfm.

✓ 10. (previously presented): The method according to claim 1, wherein said step of adjusting the content of particles includes cleaning an interior of a chamber of the film deposition system in which the film deposition process occurs using a dust cloth that produces no more than 1000 particles/cfm.

✗ 11. (previously presented): The method according to claim 1, wherein said step of adjusting the content of particles includes cleaning an interior of a chamber of the film deposition system in which the film deposition process occurs using a dust cloth that produces no more than 300 particles/cfm.

✗ 12. (previously presented): The method according to claim 9, wherein said step of adjusting the content of particles further includes pumping out the chamber after cleaning to remove floating particles within the chamber.

✓ 13. (new): A method of forming a carbon layer by vapor phase deposition, comprising the steps of:

adjusting a content of particles having a particle size of 0.5 μm or more in a film deposition system of the carbon layer to 1000 particles/ ft^3/min or less; and then

starting a film deposition process of the carbon layer;

wherein said carbon layer is formed as a protective coating on a thermal head performing thermal recording,

wherein said carbon layer is formed on top of an intermediate layer and the intermediate layer is formed on top of a lower protective layer such that the thermal head has a protective coating of a three-layer structure, and

wherein the carbon layer, the intermediate layer, and the lower protective layer are successively formed on the thermal head under a continuous vacuum.

\ 14. (new): The method according to claim 13, wherein said content of the particles having the particle size of 0.5 μm or more is reduced to 500 particles/ ft^3/min .

\ 15. (new): The method according to claim 13, wherein a lower limit of said content of the particles having the particle size of 0.5 μm or more ranges between 50 particles/ ft^3/min and 100 particles/ ft^3/min .

\ 16. (new): The method according to claim 13, wherein said carbon layer has a thickness from 0.5 μm to 5 μm , said intermediate layer has a thickness from 0.05 μm to 1 μm , and said lower protective layer has a thickness from 0.2 μm to 20 μm .

\ 17. (new): The method according to claim 13, wherein said step of adjusting the content of particles includes cleaning an interior of a chamber of the film deposition system in which the film deposition process occurs using a dust cloth that produces no more than 3000 particles/cfm.

S 18. (new): The method according to claim 13, wherein said step of adjusting the content of particles includes cleaning an interior of a chamber of the film deposition system in which the film deposition process occurs using a dust cloth that produces no more than 1000 particles/cfm.

V 19. (new): The method according to claim 13, wherein said step of adjusting the content of particles includes cleaning an interior of a chamber of the film deposition system in which the film deposition process occurs using a dust cloth that produces no more than 300 particles/cfm.

X 20. (new): The method according to claim 17, wherein said step of adjusting the content of particles further includes pumping out the chamber after cleaning to remove floating particles within the chamber.